

State and Private Forestry Fact Sheet Nevada 2018



Investment in State's Cooperative Programs

Program	FY 2017 Final
Community Forestry and Open Space	\$0
Cooperative Lands - Forest Health Management	\$583,600
Forest Legacy	\$0
Forest Stewardship	\$127,600
Landscape Scale Restoration	\$0
State Fire Assistance	\$728,772
Urban and Community Forestry	\$232,900
Volunteer Fire Assistance	\$175,597
Total	\$1,848,469

NOTE: This funding is for all entities within the state, not just the State Forester's office.

Cooperative Forestry programs are administered and implemented through partnerships between the Nevada Division of Forestry (NDF), USDA Forest Service (USFS) and other private and government entities. These programs promote the health and productivity of Nevada's forests, rangelands and rural economies. We emphasize conservation practices, water resource protection, forest product utilization, wildfire hazard reduction, wildlife habitat enhancement and support of rural economies.

Program Goals

- Improve health of Nevada's watersheds and ecosystems through increased technical and financial assistance to landowners and land managers
- Promote science-based conservation, stewardship ethics and best management practices
- Provide technical and financial assistance to local governments and private landowners to help reduce the threats from catastrophic wildland fires.

Key Issues

- · Loss of sagebrush cover type and associated habitat values from wildland fire and invasive species
- High forest stocking and poor forest health across all land ownerships
- Diminished forest products industry and associated impacts on economic viability of vegetation management projects
- · Riparian system degradation from non-native, invasive species and altered hydrology
- Impacts of persistent drought on ecosystem resilience to and recovery from disturbances
- · Fire threat in the wildland-urban interface.

Forest Facts and Accomplishments

Selected Facts	Value	FY 2017 Accomplishments	Value
Population	2,700,551	Landowners Receiving Educational or	400
Acres of Forest Land	10,563,319	Technical Assistance	
Acres of Nonindustrial Private Forest Land	212,000	Acres Covered by New or Revised Forest Stewardship Plans	1,240
Number of NIPF Landowners	15,000	Acres in Important Forest Resource Areas	1,240
Acres of Federal Land Under State Fire Protection	20,920,000	Covered by New or Revised Stewardship Plans	1,210
Acres of Private Land Under State Fire	8,200,000	Volunteer Fire Departments Assisted	108
Protection		State Fire Communities Assisted	201
Number of Rural Fire Departments	211	Coop Forest Health Acres Protected	7.033
Cities and Towns	18	Forest Legacy Project Acquisitions	0
Forest Based Employment	33	Communities Provided Urban Forestry	30
Economic Impact of Forestry (by rank)	3	Program Assistance	30
State Forestry Budget (All Sources)	44,385,200	Population Living in Communities Provided Urban Forestry Program Assistance	2,193,937
		Urban Forestry Volunteer Assistance	1,154

Program Highlights

Community Forestry and Open Space

NDF conducted outreach efforts to municipalities and eligible nonprofits regarding the Community Forest and Open Space Conservation Program (CFP). The program is also promoted through the agency's website and social media accounts. In 2016, the Carson City Department of Parks, Recreation, and Open Space expressed interest in applying for CFP funding to assist with acquisition costs of a 20 acre parcel identified in their Open Space Master Plan. As a result, Carson City developed a project proposal for 2017 CFP funding, which was accepted by NDF and submitted to USFS Region 1/Region 4 for consideration. The proposal was reviewed and progressed to the Washington Office for final consideration but was not chosen for funding. Carson City may revise and resubmit the proposal for the next round of CFP funding if the parcel is still available and alternate funding sources are unavailable.

Conservation Education

The Conservation Education program provides science-based environmental education opportunities to Nevada's citizens. NDF is a state co-sponsor of The Sustainable Forestry Initiative's Project Learning Tree (PLT) program. NDF supported the delivery of PLT modules to teachers and students at the Grizzly Ranch youth camp. NDF awarded a subgrant to Sierra Nevada Journeys, a Reno-based environmental education non-profit, for a project entitled Classrooms Unleashed and the Next Generation Science Standards/ Project Learning Tree (NGSS/PLT) Boot Camps. This project led to important environmental education reaching 218 elementary school students in eight classrooms. Additionally, 96 school teachers from six Nevada counties attended the NGSS/PLT Teacher Bootcamp where they received training in in PLT's new NGSS aligned lessons. NDF will continue this successful program.

NDF staff participated in the annual Range Camp program held in central Nevada. This camp links high school students with natural resource professionals for a week-long field school that focuses on natural resource management.

NDF nurseries developed and hosted 3 pollinator workshops for the public interested in developing pollinator gardens to support protecting this critical natural resource. Workshop participants were provided pollinator friendly flowering plants through a grant from the U.S. Fish and Wildlife Service.

Cooperative Fire Protection

Nevada's State and local fire programs protect approximately 9.5 million acres. In 2017, NDF signed cooperative wildfire protection agreements with 20 fire protection districts in 13 counties, furthering cooperation between state and local fire response and fuels reduction. Enhanced coordination with federal, state and local cooperators occurred by sending 111 staff to multiple critical interagency planning/operations meetings. NDF used Volunteer Fire Assistance to provide 1,090 pieces of firefighting

personal protective equipment, p-25 compliant radios, pumps, brass, nozzles and hose to volunteer fire departments. Over 761 wildfires burned 1.2M acres and NDF responded to 325 fires, cost-shared on 25, and incurred suppression costs of \$7.3 million. NDF held 110 fire prevention events for public education and provided 72 first responder trainings for state and local cooperators. NDF staff and cooperators provided wildfire prevention education and materials to 46,840 people at local events. NDF trained more than 2,011 employees, inmates and cooperators, including sending 104 staff to wildland fire-related training. Through the FEPP/FPP programs NDF maintained 395 pieces of equipment and disposed of 34 pieces. NDF built up a water tender, fuel truck, Type-6 engine, and two Type-3 engines. NDF repaired many pieces of the fleet of wildfire suppression resources to ensure effective response. NDF completed 2,102 acres of fuel reduction. These projects protect an estimated 65 communities. Pass-through funds are awarded to at-risk communities with current CWPPs, using an interagency competitive process. Eleven cooperators' projects were funded in 2017, which assists in the completion of high priority fuels reduction as well as wildfire risk reduction and mitigation education. NDF adopted the Nevada Network of Fire Adapted Communities organization and began building the program to function statewide with a full time coordinator, membership and operating manual.

Economic Action

NDF continued with efforts to find higher value product for the wood harvested from forest restoration projects. Increasing value-added products helps reduce air quality impacts through reducing the amount of slash burning, removes green waste from local landfills and offsets the treatment costs. NDF used its cable yarder to produce over 100 cords of firewood from a 25 acre fuels reduction project on USFS lands in the Lake Tahoe Basin. The sub-merchantable timber from this project will be donated to the local Washoe Tribe for use by tribal elders. This firewood donation has a value of \$20,000. NDF has provided financial support to a local company who added composted biochar, produced from pinyon and juniper removal projects, to NV Prison Industry's production alfalfa field. The alfalfa is used to feed cows at the prison's dairy farm. The Desert Research Institute (DRI), funded through an LSR grant, continues to examine the potential of biochar to improve moisture status, carbon sequestration and offset

feed cows at the prison's dairy farm. The Desert Research Institute (DRI), funded through an LSR grant, continues to examine the potential of biochar to improve moisture status, carbon sequestration and offset of petro-chemical fertilizer in agriculture settings, as well as urban street trees and nursery potting mixes. NDF is developing partnerships to bring a 1mw cogeneration power plant back on line. Federal land management agencies support for opening the plant includes using a Good Neighbor Agreement (GNA) to fund a contract for a feasibility study for restarting, enhancing efficiency and sustainably operating the plant.

NDF joined the Counsel of Western States Foresters' Forest Utilization Network this year in Denver at their first meeting.

NDF joined with Saving the West (STW) and created a Forest Service Wood Utilization Team (WUT) funded with a USFS Wood Utilization Grant. The Wood Utilization Grant addresses key problem identified by the STW: the lack of existing markets for excess wood supply.

Forest Health Protection

NDF provided technical assistance to 18 private landowners, three state parks, one county park and four city parks. Pest control projects on private lands addressed pine and pinyon engraver, pinyon blister rust, pine needle scale, fir engraver beetle, dwarf mistletoe and conifer encroachment in Aspen stands. NDF treated mistletoe infestations, eradicated tamarisk and restored native trees and riparian vegetation along the Colorado River floodplain at Big Bend State Park. Restoration of the State's oldest Arizona ash grove at Spring Mtn. Ranch State Park continued with planting saplings grown from site-collected seed. Nevada State Parks has fenced out damaging wild burros and applied blood meal to prevent animal browsing. A total of 700 additional seedlings were planted at Beaver Dam State Park to restore the relic PIPO stand lost in a 2014 wildfire.

Juniper mistletoe and juniper twig beetle were controlled on 60 acres in Washoe Co. parks and 7 acres of TSI was completed in cottonwood galleries on the Truckee river in Sparks. Cooperative (NV Dept. Ag, USFS, and Mt. Rose Ski Resort) bark beetle monitoring continued in the Spring Mountains, Carson Range and Ruby Mountains with no large increases of bark beetle outbreaks noted. Aerial detection surveys showed reduced insect or disease activity across the state. Mountain pine beetle activity in high elevation white pines was noted, though acreage was insignificant. The exotic Mediterranean Pine Beetle was documented for the first time in NV. Surveys mapped approximately 20,000 acres of damage from multiple insects or diseases.

"Aspen decline" and "Aspen dieback" are ongoing problems across the state. Aspen defoliation from the exotic satin moth increased slightly, with reported occurrences in five counties across northern Nevada. A localized outbreak in the Lake Tahoe State Park caused heavy (50-90%) defoliation on 226 acres.

Forest Legacy

The Forest Legacy Program Coordinator has been working with the Nevada Land Trust, The Rocky Mountain Elk Foundation, local governments and private landowners to develop projects in the Northern and Western Regions of Nevada. While no projects were submitted for ranking in 2017, NDF anticipates having at least one project developed for the next submittal period. Additionally, the Forest Legacy Program is highlighted on the NDF website and promoted through the social media accounts.

The Program Coordinator participated in the Western Regional Joint Program Managers Meeting in Coeur d'Alene, Idaho from June 6-9, 2017. The Program Coordinator also participated in a Conservation Easement Workshop facilitated by the Nevada State Office of the Natural Resources Conservation Service on September 12, 2017, and attended Rally 2017: The National Land Conservation Conference held in Denver, Colorado from October 26-28.

Forest Stewardship

The NDF Advisory Committee held two day-long meetings in 2017 on March 2nd and October 3rd. The spring meeting focused primarily on reviewing project pre-proposals submitted to NDF for the Landscape Scale Restoration and Western States Fire Managers grants, while the fall meeting was reserved for strategic planning and discussion of multi-partner collaboration on future projects. The next Advisory Committee meeting will be held in March 2018.

NDF staff continue to publicize the Forest Stewardship and Forest Legacy programs, as well as NDF's Rural Forestry Assistance program, to local conservation districts and other interested groups throughout the state. Additionally, NDF resources staff participated in a Tools for Engaging Landowners Effectively (TELE) workshop in October of 2017. The Yale School of Forestry and Environmental Studies facilitated the two-day workshop as part of their Sustaining Family Forests Initiative. Workshop attendees learned to incorporate proven TELE techniques into program outreach messaging and media materials. Conservation staff continue to develop management plans for all project work, which are entered into the SMART database. During Federal Fiscal Year 2017, 21 new management plans were completed, covering over 5,000 acres of state and private property in Nevada. Forest Stewardship Plan monitoring was completed for the seven flagged plans during the summer of 2017.

The Stewardship/Legacy Coordinator participated in the Western Regional Joint Program Managers Meeting in Coeur d'Alene, Idaho from June 6-9, as well as the National Forest Stewardship Program Meeting in Saratoga Springs, New York from October 17-19, 2017.

Landowner Assistance

NDF staff provided fire rehabilitation assistance to 58 landowners. Assistance included site visits, planting/seeding recommendations, referrals, suppression damage repair (dozer line seeding, fence repair), straw wattle/LEB erosion barrier installation and broadcast seeding. Approximately 220 acres of burned areas has been seeded for critical area stabilization.

The Division contracted with a local timber harvester to conduct a salvage harvest of fire-killed timber. The harvest covered 125 acres across, included 16 separate private landowners and generated 1.35 mmbf.

An additional 400 landowners were provided technical assistance on issues related to forest health, fire hazard reduction, plant material recommendations, tree care and other stewardship related topics.

Landscape Scale Restoration

Nevada Drought: The purpose of the project is to increase tree survival during water conservation efforts. NDF and partners will create and disseminate an irrigation handbook and video on efficient and effective tree irrigation methods and conduct hands-on public outreach to ensure guidelines are understood by industry professionals and citizens. In 2017, NDF awarded the University of Nevada, Las Vegas a subgrant to complete the irrigation handbook.

Pinyon & Juniper Encroachment: The project was awarded in 2016. Currently, fuels reduction projects have been completed or are underway on 250 acres of Phase 1 and 2 PJ at three project sites. Seventy-five acres of sagebrush habitat are scheduled for reseeding during the 2017/2018 winter. Twenty acres within the treatment area have been chemically treated for noxious weeds, with herbicide use focused on reducing the population of Russian starthistle.

Fire Information Portal: NDF sub-contractor Timmons Group, in coordination with Fire Program Solutions,

LLC and Intterra, Inc., developed, tested and deployed the public and professional viewers of the Nevada Natural Resources and Fire Information Portal. The public launch of the portal coincided with the May 5, 2017 "Nevada Wildfire Awareness Day." Throughout the summer and fall of 2017, NDF continued to promote awareness of the portal and provide input on refining portal features. An updated version of the portal was released October 17, 2017.

Nevada Biochar: The multi-year laboratory and greenhouse study, led by the Desert Research Institute (DRI), is nearing completion. Project deliverables include biochar application guidelines and fact sheets geared towards both professional nursery operations and homeowners.

Nevada Urban Inventory: NDF hired a contractor to conduct tree inventories for municipalities lacking current or complete inventories. This year's focus areas are Fallon, Fernley, Lovelock, Yerington, Churchill and Mineral Counties.

Urban and Community Forestry

The Urban and Community Forestry Program (U&CF) promotes active management of urban forest resources through supporting public tree inventories and fostering education of green industry professionals. The U&CF Program collaborated with Western Chapter of the International Society of Arboriculture (WCISA) and ArborMaster to deliver 3 well-attended trainings in Tree Risk Assessment Qualification (TRAQ), tree felling and tree worker safety. This effort led to ten new TRAQ qualified individuals in Nevada. NDF issued sub-grants to WCISA and UNRCE to fund bilingual Tree Climbing Skills workshops in both Henderson and Reno and bilingual landscape training in Las Vegas and Reno. Approximately 95 climbers attended the tree climbing workshop and 120 hours of bilingual landscape training were provided. NDF has funded UNCE to create educational materials and tree watering guides for northern and southern Nevada. NDF sponsors and supports the TreeCity USA program in NV. Nevada has 13 qualified cities. The University of Nevada, Las Vegas (UNLV) and University of Nevada, Reno (UNR) were both recognized as Tree Campus USA's. A robust internal NDF training program, Essentials of Arboriculture, was offered in Las Vegas, reaching 40 State and Federal employees. In 2018 this successful training will be offered in underserved rural areas. Inventories have been completed in 5 northern Nevada communities with more underway. U&CF funded 3 urban foresters' attendance at the Municipal Forestry Institute; the U&CF coordinator attended as cadre. The biochar study (LSR grant) from DRI is still in progress, with final deliverables in 2018. In an effort to increase urban landscape species diversity, U&CF is working with our state nursery and southern NV cities to grow and plant at least 10 new species for performance trials in southern Nevada.

Contact Information



Nevada Division of Forestry

Kacey KC State Forester 2478 Fairview Drive Carson City, NV 89701 775-684-2522 kaceykc@forestry.nv.gov

US Forest Service Intermountain Region

Mike Dudley

Director, State & Private Forestry

USDA Forest Service

324 25th Street

Ogden, UT 844401

801-625-5253

mdudley@fs.fed.us